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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 935,156	08 23 2001	Mona Masghati	1027co	1961

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EXAMINER

PATEL, TULSIDAS C

ART UNIT	PAPER NUMBER
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2839

DATE MAILED: 11 06 2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,156

Applicant(s)

MASGHATI ET AL

Examiner

T. C. Patel

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other.

DETAILED ACTION

General Status

1. This is a First Action on the Merits for CIP. Claims 1-31 are pending in the case.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 2, 7, 8, 22, 23 and 26 are rejected under 35 U.S.C. § 102(e) as being anticipated by Do et al. (US 6,266,196).

Do et al. in figure 6, discloses an optical component 512, having an alignment feature at the button at 510, for positioning the optical component relative to an optical bench 502. The alignment feature of the optical component extends into the optical component from an exterior

Art Unit: 2839

wall (bottom) and the alignment feature comprises a reentrant sidewall (not numbered). The alignment feature, in this case is a raceway or slot with a reentrant sidewall. For claim 22, two sidewalls with reentrant features are disclosed. For claims 23 and 26, frusto-triangular profile is can be seen in figure 6A and with two sidewalls taken together, has an hourglass profile.

4. Claims 1, 3-9, 22, 23, 26, and 29-31 are rejected under 35 U.S.C. § 102(a, e) as being anticipated by Hargreaves et al. (US 6,074,103).

Hargreaves et al. in figures 1 and 4J, discloses an optical component 4, having an alignment feature at the bottom at 41, for positioning the optical component relative to an optical bench 1. The alignment feature of the optical component extends into the optical component from an exterior wall and the alignment feature comprises a reentrant sidewall (not numbered). The alignment feature, in this case is a raceway or slot with a reentrant sidewalls and where optical fiber is positioned for positioning relative to the optical bench. For claim 3, the alignment feature, as shown in figures 3A, 3B is depressed and also for claim 4, the exterior wall is bonded to the optical bench at 14 (figure 2B). For claim 9, soldering or coating is used to connect the optical component to the bench. For claim 22, two sidewalls with reentrant features are disclosed. For claims 23 and 26, frusto-triangular profile is can be seen in figure 4J and with two sidewalls taken together, has an hourglass profile. For claims 29-31, the various steps involved in alignment are disclosed in figures 1-4.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 9-21, 24, 25 and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Do et al. (US 6,266,196) in view of Hargreaves et al. (US 6,074,103)

As discussed above, Do et al. satisfies the limitation of claims 1, 2, 7, 8, 22, 23 and

26. However, Do et al. does not disclose the optical component being affixed to the bench using solder. Hargreaves et al. discloses soldering of optical component to the bench.

It would have been obvious to one of ordinary skill in the art to solder the optical component on the bench as taught by Hargreaves et al. so that the aligned position of the optical component can be fixed on the bench. In so far as to various thickness of coating/plating, etc, are concerned, it is a matter of design choice. Also providing multiple alignment slots would be duplication of parts.

7. Claims 10-21, 24, 25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hargreaves et al. (US 6,074,103).

As discussed above, Hargreaves et al., satisfies the limitation of claims 1, 3-9, 22, 23, 26, and 29-31. However, Hargreaves et al. does not disclose various coating thickness and dimensions.

It would have been obvious to one of ordinary skill in the art to solder the optical component on the bench as taught by Hargreaves et al. so that the aligned position of the optical component can be fixed on the bench. In so far as to various thickness of coating/plating, etc. are concerned, it is a matter of design choice. Also providing multiple alignment slots would be duplication of parts.

8. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (US 6,393,685) in view of Hargreaves et al. (US 6,074,103).

Collins, in figure 21, discloses in figures 21 and 26, discloses alignment of an optical component with respect to a bench. The arrangement in figure 21, the bottom part has two reentrant sidewalls and complimentary configuration for the top part. It is obvious to reverse the arrangement and that top part (optical component) with slot or dovetail-dodo configuration for and complimentary configuration for the bottom piece or bottom piece. Hargreaves et al teach soldering of optical component to the bench.

It would have been obvious to one of ordinary skill in the art to provide the mating arrangement of figure 21 for bench alignment. In so far as to various thickness of coating/plating, etc. are concerned, it is a matter of design choice. Also providing multiple alignment slots would be duplication of parts.

9. The prior art made of record and not relied upon is considered pertinent to applicant's invention. Van Leijenhorst et al. (US 4,691,586) and WO 91/06022 are cited for various arrangement of optical pieces used for alignment to a bench.

Art Unit: 2839


Applicant also should consider these references in response to this office action.

Should issue arise concerning the rejection presented above, these references may be relied upon in a subsequent action to support the lack of novelty or obviousness of claimed subject matter to one of ordinary skill in the art.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. C. Patel whose telephone number is (703) 308-1736. The examiner can normally be reached on 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (703) 308-2710. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1736.



T. C. Patel
Primary Examiner
Art Unit 2839

tcp
October 31, 2002